

### **Abstract of the Disclosure**

A remotely mountable weatherproof bi-directional, half-duplex switching amplifier system is designed to provide maximum range for low power half-duplex radios such as Spread Spectrum radio transceivers. This invention automatically senses when to go into the transmitter amplification mode and puts all the transmit power right at the antenna. In the receive mode, it provides low noise pre amplification of received signals at the antenna thereby minimizing or even eliminating the effects of the coaxial transmission line from the radio transceiver to the remote location of the antenna. The invention is preferred to be in a waterproof enclosure adjacent to the antenna mounted to a pole and powered by a DC injector and excited by a transceiver, both pole and injector located remote from the mounting pole and also includes an improved electrostatic overvoltage protection device.